the power dissipation within the vessel is at least 25 W/liter but no more than 150 W/liter.

2. [(Amended)] An apparatus as claimed in claim 1 wherein the power radiated by each transducer is in the range 1-2 W/cm^2.

3. [(Amended)] An apparatus as claimed in claim 1 wherein the number of transducers, the power of the transducers, and the volume of the vessel are such that the power density is between 40 and 80 W/litre.

4. [(Amended)] An apparatus as claimed in claim 1 wherein the vessel is double walled, with an inner wall and an outer wall with a space between them, the transducers being attached to the outer wall, the fluid to be treated is enclosed within the inner wall, and the space between the two walls is filled by a low attenuation buffer liquid whose cavitation threshold is above that of the liquid to be treated.

5. [(Amended)] An apparatus as claimed in claim 1 comprising a plurality of ultrasonic signal generators, each signal generator being arranged to energise a separate group of the transducers.

7. [(Amended)] An apparatus as claimed in claim 5 wherein at least one group of the transducers resonates at a different frequency to other groups of the transducers, and each signal generator is arranged to energise the respective group of the transducers at their resonant frequency.

Enter the following new Claim 8:

8. An apparatus as claimed in claim 6 wherein at least